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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,956	09/13/2001	Chi Bom Chae	1546.1004	5954
21171	7590	10/16/2006	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			RUSSEL, JEFFREY E	
			ART UNIT	PAPER NUMBER
			1654	

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/913,956

Applicant(s)

CHAE ET AL.

Examiner

Jeffrey E. Russel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5 and 6 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20041021.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

1. Claims 3 and 4 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in the reply filed on January 6, 2006.

Applicant's election with traverse of the species of Group I/SEQ ID NO:1, in the reply filed on January 6, 2006 is acknowledged. The traversal is on the ground(s) that the species are so closely related that they should remain in the same application and that the additional search would not be unduly burdensome. This is not found persuasive because the claims lack the same or corresponding special technical feature, as evidenced by the prior art applied against the claims in the rejection below. Each of the species would require a separate sequence search, which constitutes an undue burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Korea on June 1, 1998. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, because the PCT/United States application was filed more than twelve months thereafter. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Korea on June 1, 1998. See the claim for priority set forth in the declaration filed August 21, 2001. However, a certified copy of the Korean application as required by 35 U.S.C. 119(b) is not present in the image file wrapper. While a copy of the foreign priority application is ordinarily provided by the Receiving Office, the examiner can not find any indication that a claim for priority was made in PCT application PCT/KR99/00796. It will be necessary for Applicants to provide a certified copy of

the foreign priority application in order to perfect their claim for priority in this national stage application.

3. The Sequence Listing filed February 11, 2005 is approved.
4. The drawings are objected to because amino acid sequences subject to the sequence disclosure rules are present in Figures 6-10b and 13-15b, but SEQ ID NOS are not present after each sequence. See 37 CFR 1.821(d). Applicants are required either to file corrected drawing sheets in order to include the SEQ ID NOS, or more preferably to insert the appropriate SEQ ID NOS in the corresponding sections of the Brief Description of the Drawings.
5. The disclosure is objected to because of the following informalities: Amino acid sequences subject to the sequence disclosure rules are present at, e.g., pages 7, 12, 27, 30-33, and 35-37, but no SEQ ID NOS are present after the sequences. See 37 CFR 1.821(d). Appropriate correction is required.
6. Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent basis in the claims for the phrase “the peptide” at claim 5, line 2, and at claim 6, line 2. It is believed that the phrase “as set forth in claim 1” should be inserted after “the peptide”.
7. Claims 1 and 2 are objected to because of the following informalities: At claim 1, line 1, “the” (second occurrence) should be deleted. Appropriate correction is required.
8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 5, and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Montal et al (U.S. Patent No. 6,251,854). Montal et al teach the hexapeptide RRRRRR for use in pharmaceutical compositions. See, e.g., column 8, lines 37-54; Table 1; and claim 9. With respect to Applicants' claim limitations "for the treatment of cancer" and "for the treatment of angiogenesis-related diseases", these limitations are intended use limitations which do not impart patentability to product claims where the product is otherwise anticipated by the prior art.
10. Claim 2 would be allowable if rewritten to overcome the claim objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The prior art of record does not teach or suggest a hexapeptide consisting of the amino acid sequence designated SEQ ID NO:1.

The Hungarian Patent 9702554 A2 is cited as art of interest, teaching hexapeptides comprised of lysine, arginine, and histidine residues and used for the same purposes claimed by Applicants. However, the reference does not teach or suggest hexapeptides having the specific amino acid sequences required by the instant claims.

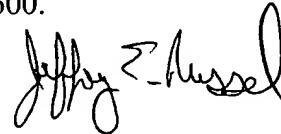
The Ferrer-Montiel et al article (Nature Biotechnology, Volume 16, pages 286-291) is cited as art of interest, teaching various arginine-rich hexapeptides. However, the hexapeptides do not anticipate or suggest hexapeptides of the sequences required by Applicants' claims.

The Iida et al article (Int. J. Immunopharmacology, Vol. 11, pages 249-258) is cited as art of interest, teaching the hexapeptide (L-Arg)<sub>6</sub> and being essentially duplicative of Montal et al applied above.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey E. Russel at telephone number (571) 272-0969. The examiner can normally be reached on Monday-Thursday from 8:00 A.M. to 5:30 P.M. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Cecilia Tsang can be reached at (571) 272-0562. The fax number for formal communications to be entered into the record is (571) 273-8300; for informal communications such as proposed amendments, the fax number (571) 273-0969 can be used. The telephone number for the Technology Center 1600 receptionist is (571) 272-1600.

A handwritten signature in black ink, appearing to read "Jeffrey E. Russel". The signature is stylized with a large, looped "J" and a cursive "E".

Jeffrey E. Russel

Primary Patent Examiner

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JRussel

October 5, 2006